

## ABSTRACT

Wireless personal area networks with frequency hopping and rotation of the frequency hopping sequences. In one embodiment, a method of wireless communication is provided, the method including: transmitting a beacon frame by a piconet coordinator that specifies a rotation index and hopping index; receiving a beacon frame by a device associated with or to be associated with the piconet coordinator; extracting the rotation index and hopping index by the MAC of the recipient device and communicating them to the PHY for transmission and reception in a current superframe; missing a subsequent beacon frame by a recipient device; and using the rotation index and hopping index previously received to determine a current frequency hopping sequence for a current superframe following the missed beacon frame.